

SINTERING - DATA - SHEET

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powder - code:	Diaweld-4000
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main component:	Fe	binder:	2 % alcohol	date:	24.06.2013
machine type:	DSP-25	aver. Grain size		testperson:	OE
utilisation:	Weldable Backing powder for temperatures above 780 °C				

heating by	die:	X	temperature measure-	pyroscope:	
	punches:		ment by:	thermocouple:	X

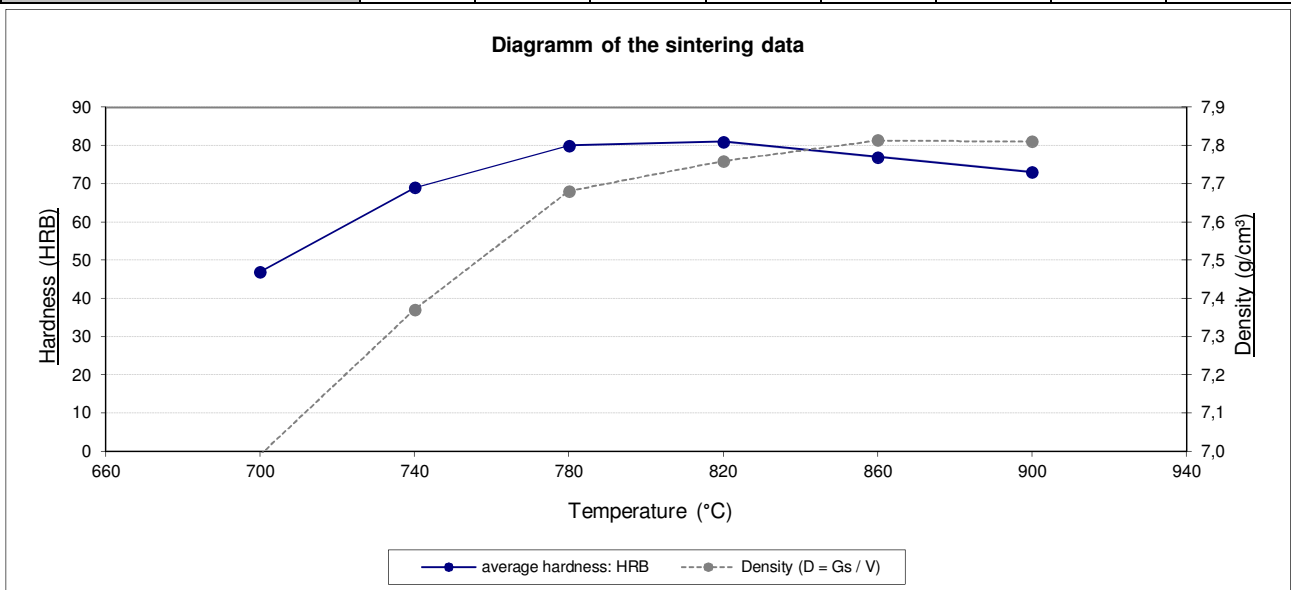
temperature:	°C	700	740	780	820	860	900	940	980
specific pressure:	N/mm ²	35	==>						
sintering time:	min	3	==>						

bending strength:	N/mm ²								
stretch at break:	%								
average hardness:	HRB	47	69	80	81	77	73		
hardness scattering:	HRB	39-56	64-74	78-82	78-82	76-78	70-77		
average hardness:	HRC								
hardness scattering:	HRC								
weight:	g	17	==>						
weight after sintering:	g								

Volume ($V = G_s - G_w$)	cm ³								
Density ($D = G_s / V$)	g/cm ³	6,99	7,37	7,68	7,76	7,81	7,81		

weight loss ($G = G_e - G_s$)	g								
rel. Weight loss ($G_r = G * 100$)	%								

notes:									
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Attention:

Depending on mould-geometry and type and place of temperature-measurement an increase up to 60 °C must be done to get the same result !
 In case of moulds with a high number of graphite punches a certain friction value needs to be considered. To obtain the detailed formula you are welcome to contact us.

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